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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,570	06/12/2006	Thomas Scherer	WUE-61	1698

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EXAMINER	
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ART UNIT	PAPER NUMBER
4128	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,570	SCHERER ET AL.	
	Examiner	Art Unit	
	MOHAMMAD ALIKHANI	4128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/12/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2 and 4-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Fauret (US 7,337,623 B2).

Regarding claim 1, the Fauret reference discloses a temperature regulating device (at Fig.1) of the interior of an aircraft with one or plurality of cells or sections (see column 1 lines 1-3), comprising a controlled mixer valve or trim adjustment valve (at 13 in Fig.1) for the mixing of engine bleed air (at 9 in Fig.1) with air cooler than the engine bleed air (see air mixer at 12 in Fig.1) in order to regulates the fractions of hot air emanating from the bleed air compressor (9) and cold air emanating from the air mixer or mixing chamber (12) to obtain pre-heated mixed air flowing out of the mixer valve (see column 4 lines 7-11); a distribution line (at 6 in Fig.1) connected to the outlet of the mixer valve or trim adjustment valve (at 13 in Fig.1) which is connected to the sections or cells of the interior of an aircraft by means of at least two supply lines (at 5 and 7 in Fig.1); individual heating units (at 1 and 11 in Fig.1) assigned to the respective sections or cells; sensors (at 15 in fig. 1 and also see column 4 lines 44-45 for

additional measuring devices in the further cells) assigned to the individual sections or cells(at 1or 11 in Fig. 1) for the respective actual temperatures (see column 4 lines 37-40) and transmitters (at 16 in fig. 1 and also see column 4 lines 44-45 for additional measuring devices in the further cells) for the respective nominal temperatures (at space 4 in Fig. 1 and see column 4 lines 41-43).

The Fauret reference further discloses a control system (at 10 and 17 in Fig. 1) comprising a control device (at 10 in Fig. 1) which controls the trim adjustment or mixer valve 13 in Fig.1 (see the column 4 lines 3-14 and column 5 lines 64-67) dependent upon the nominal temperatures of sections or cells which for example has been sensed by sensor 16 (at space 4 in Fig. 1) and set by means of the trim adjustment valve (at 13 in Fig. 1); and a control device (at 17 in Fig. 1) and the respective actual temperatures of the individual cells sections which for example has been sensed by sensor 15 (at space 1 in Fig. 1) in such a way that the pre-heated mixed air supplied by mixing valve13 (in Fig.1) is of a temperature which essentially corresponds to the lowest of the nominal temperatures required in the section or cells (see column 5 lines 64-67 and column 6 lines 1-4) and control device (at 17 in Fig. 1) controls the heating units assigned to the other sections corresponding to the differences between the respective nominal temperatures and the respective actual temperatures (see figures 1-3 ,column 5 lines 34-63 and lines 8-33 also Fig. 8 , lines 55-67 and lines 18-36).

Regarding claim 2, the Fauret reference further discloses the heating units (at 1 and 11 in Fig.1) in the supply lines (at 5 and 6 in Fig.1) are positioned close to entrances to the respective sections or cells (at 4 in Fig.1).

Regarding claim 4, the Fauret reference discloses the sensors (at 14-15 in Fig. 1) for the respective actual temperatures are positioned in the individual sections and/or in the supply lines (at 5 and 6 in Fig. 1) down current from the heating units (at 2 in Fig. 1).

Regarding claim 5, the Fauret reference discloses the air which is cooler than the engine bleed air (as discussed in claim 1 supra) and which is supplied to the mixer valve (at 13 in Fig.1) comes out of a mixing chamber or air mixer (at 12 in Fig.1).

Regarding claim 6, the Fauret reference discloses that the regulator unit (at 10 and 17 in Fig. 1-2 and Fig. 8) takes into consideration the nominal and actual temperatures and the characteristics of the respective sections for the control of the heating units (See column 5 lines 23-49).

Regarding claim 7, the Fauret reference discloses that the transmitters and sensors and/or the heating units (as discussed supra) are coupled to the regulator unit or control devices by means of one or several data buses or data transmission lines (see column 4 line 53-56) .

Regarding claim 8, the Fauret reference discloses that the regulator or control unit (as discussed supra) with a computer program has at least one central section (at 10 and transmitters 14 and 16 in Fig. 1) temperature regulator and a decentralized (at 17 and transmitter 15 in Fig.1) heat regulator for each heating unit (also see column 3 lines 9-28).

Regarding claims 9-10, the Fauret reference comprises all the structural elements which inherently perform the process of claims 9 and 10 since the intent of the prior art is to regulate temperature in a similar fashion to the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fauret (US 7,337,623 B2) in view of Fischer et al. (US 5,545,084).

Regarding claim 3, the Fauret reference discloses a unit heater with heating elements (at 2 in Fig. 1). The Fauret reference DIFFERS in that does not include electric heating elements. Attention, however, is directed to the Fischer et al. reference which discloses electric heaters in air supply duct to each zone (see column 4 lines 61-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Fauret by employing electric heaters, in view of the teaching of Fischer et al. for using an available energy source in the aircraft system for heating purposes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ALIKHANI whose telephone number is (571)270-7728. The examiner can normally be reached on Monday through Friday 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoa Huynh can be reached on 571-272-4888. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MA
AU 4128

/Khoa D. Huynh/
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